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(54) Title: NOVEL IFNGAMMA-LIKE POLYPEPTIDES

(57) Abstract: The present invention discloses novel open reading frames (ORFs) in human genome encoding for ORFs characterized for polypeptides having at least one activity of human Interferon gamma, and reagents related thereto including variants and fragments of said polypeptides, as well as the encoding nucleic acids and ligands directed against them. The invention provides methods for identifying and preparing these molecules, for manufacturing pharmaceutical compositions containing them, and for using them in the diagnosis, prevention and treatment of diseases.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50939

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C07K14/57 C12N15/11 C12N15/62 A61K38/21

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 C07K C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, EMBL, WPI Data, PAJ, BIOSIS, MEDLINE, EMBASE, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category ^a	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 03/055913 A (ARES TRADING SA ;POWER CHRISTINE (FR); PHELPS CHRISTOPHER BENJAMIN) 10 July 2003 (2003-07-10) INSP037 displays 82.4% identity to SEQ. ID. NO: 156 and has 6 non-conservative substitutions. the whole document ---	1, 9, 10, 22-26, 29, 33-37, 39-41
X	DATABASE EMBL 'Online! 12 December 1997 (1997-12-12) HEATH P.: "Human DNA sequence from clone RP1-192p9 on chromosome Xp11.23-11.4" retrieved from EBI Database accession no. AL020989 XP002248668 the whole document ---	22, 23
		-/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents:

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- *E* earlier document but published on or after the International filing date
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- *P* document published prior to the International filing date but later than the priority date claimed

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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the International search

14 June 2004

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50939

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online! 8 October 1996 (1996-10-08) DAVIES J. : "Human DNA sequence from clone LLOXNC01-160A4 on chromosome X" retrieved from EBI Database accession no. Z80900 XP002284300 100% identity between nt. 21975 and 22334 over the whole sequence of SEQ. ID. NO: 9</p> <p>-----</p> <p>DATABASE EMBL 'Online! 18 June 1999 (1999-06-18) MAHAIRAS G.G., WALLACE J.C., SMITH K. ET AL.: "Sequence-tagged connection: a sequence approach to mapping and scannin the human genome." retrieved from EBI Database accession no. AQ607444 XP002284301 99.95% identical to SEQ. ID. NO: 9 the whole document</p> <p>-----</p> <p>WO 01/57276 A (CHEN WENSHENG ;HANZEL DAVID K (US); PENN SHARRON G (US); RANK DAVI) 9 August 2001 (2001-08-09) the whole document & DATABASE EMBL 'Online! 9 August 2001 (2001-08-09) PENN S.G., HANZEL D.K., CHEN W., RANK D.R.: "Human genome-derived single exon nucleic acid probes for analyzing gene expression in human bone marrow." retrieved from EBI Database accession no. AAM70428 XP002248680 SEQ.ID.NO: 30734 shown 85.7% with SEQ. ID. NO: 156 over 49 aa.</p> <p>-----</p> <p>WO 01/75067 A (HYSEQ INC ;LIU CHENGHUA (US); TANG Y TOM (US); DRMANAC RODOJE T (U) 11 October 2001 (2001-10-11) & DATABASE EMBL 'Online! 11 October 2001 (2001-10-11) DRMANAC R.T., LIU C., TANG Y.T.: "Novel human diagnostic protein #134" retrieved from EBI Database accession no. ABG00143 XP002248681 87.8% identity with SEQ. ID. NO: 31</p>	20-23, 26
X		22, 23
A		
A		

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/50939

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 37, 38, 41
because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210
2. Claims Nos.: 13, 14, 16–18, 20, 23–27, 30, 31, 33–41, 47
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of Invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Although claims 37,38 and 41 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Continuation of Box I.1

Claims Nos.: 37,38,41

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

Continuation of Box I.2

Claims Nos.: 13,14,16-18, 20, 23-27,30,31, 33-41,47

Present claims 13,14,16-18, 20, 23-27,30,31, 33-41,47 relate to an extremely large number of possible compoundss. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the antibodies, antisense oligonucleotides and siRNAs.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/50939

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